STATE BOARD OF HEALTH

INDIANAPOLIS

OFFICE MEMORANDUM

67PM-

Brian W. Opel

Oral H. Hert

SUBJECT: 96th Street Landfill

Marion County

EPA Region 5 Records Ctr.

On October 30, 1973, Al Klatte of Marion County Health and Hospital Corporation advised us of serious gas and leachate problems discovered at the "96th Street Landfill". Members of his staff had inspected the site. Samples of leachate had been collected on October 29, on-site and downstream from the site as far as Crooked Creek at 71st Street. Analysis reports were not expected for about two weeks. surface drainage ditch on-site flows into Oil Creek, which enters Crooked Creek.

I accompanied Ron McAhron on an investigation on October 30. We discovered about 12 "geysers" of gas-driven leachate. In other places on the site gas was escaping to the atmosphere. Application of a final cover of about two feet of clay soil had been completed in early October, 1973. The "leachate geysers" vary in distance from the drainage ditch from 5 to 30 feet, and all flow into the ditch. The ditch runs along the west and south edges of the filled area. Leachate bubbled 4 to 6 inches in height in most of the "geysers". Samples of leachate were taken.

On October 31, I spoke with Robert Morse of Health and Hospital Corporation. He explained that the corporate owners of the site, Sanitas, had flown in their "expert" from the east coast to evaluate the situation and advise of corrective measures. His proposed solution was to install a perforated pipe network below ground level to aid in venting the gas uniformly. I suggested to Morse that an additional measure which should be taken is excavation of a holding pond to catch all the leachate and prevent further contamination of the streams; and if necessary to prevent pond overflow, conveyance of the leachate to a sewage treatment plant.

Morse incorporated this suggestion in a letter sent to Sanitation Management Company, the subsidiary of Sanitas, on November 1, ordering that corrective measures be implemented before November 9.

On November 2, I contacted Pat Lynch, EPA - Chicago, to inform him of the situation and ask for his comments and advice. Lynch contacted Max Noecker, EPA - Evansville, who later contacted me to offer his assistance.

Lynch visited the site on November 3. He then made several recommendations, which I passed on to Robert Morse. These included:

- 1. Advise owners of nearby buildings of need to ventilate.
- The piping network which had been installed was insufficient.
- 3. Contact the area fire department and advise them of the possible hazards created.
- 4. Learn from Sanitas what liquid wastes have been deposited.
- 5. Advise USGS of the status of the site. Obtain data from their on-site monitoring wells.

Lynch further suggested the possibility of leakage of gas from a pipeline in the area, as the amount of gas escaping is excessive.

Movies were taken on November 5, by Dave Lamm.

Mr. Brown, Department of Natural Resources - Division of Oil and Gas, was contacted to learn whether there are pipelines in the immediate area. It was learned that Panhandle Eastern has four pipelines crossing the section in which the disposal site is located. They have been contacted.

Woody Smith was contacted on November 5, to seek analysis of gases being produced. An explosimeter was taken to the site to determine the hazard involved. In several locations on-site explosive levels were indicated. No hazard is believed to exist at any distance from the points of gas emission.

Max Noecker will be sending a geologist on his staff, who works in ground water hydrology, on November 6, to help analyze the production of such an excessive amount of leachate.

BWO/mc

cc: Robert W. Heider
Samuel L. Moore
Roland P. Dove
Chester H. Canham

On the afternoon of November 6, Dove and Eugene Shadoir, EPA, Evansville, Geologist, visited the site. Shadoir had been instructed to collect samples of the gas to be analyzed in Chicago to see if by chance the gas in the landfill had migrated over from the refinery or pipeline.

Approximately 20 vent pipes had been installed but more are needed as the gas is starting to escape in the central portion of the site. Several relatively shallow holes had been excavated in the southern portion of the site and leachate was observed to be bubbling and rolling much as in a sewage aeration tank. A small dike had been constructed along the landfill side of the ditch and appeared to be containing the small amount of leachate on the ground surface.

Shadoir will report his findings back to us in a few days.